

REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested. Claims 23-25 and 32-33 are canceled, new claim 40 is added, and claims 1-22, 25-31, and 34-39 are pending in the application.

The withdrawn rejection of the claims under 35 USC §103 in view of U.S. Patent Publication 2003/0051130 by McLampy et al. in view of U.S. Patent No. 6,795,920 to Bacha et al. is acknowledged with appreciation.

Independent Claims 1, 10, 18, and 27¹ stand rejected under 35 USC §102 in view of U.S. Patent Publication No. US 2002/0031126 to Crichton et al. This rejection is respectfully traversed, as the rejection fails to establish that Crichton et al. discloses each and every element in the manner claimed.

In particular, anticipation cannot be established based on a piecemeal application of the reference, where the Examiner picks and chooses isolated features of the reference in an attempt to synthesize the claimed invention; rather, the single prior art reference must not only disclose each element that is claimed, but the reference also must disclose that the elements are arranged as in the claims under review. *In re Bond*, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990) (citing *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984)).

Crichton et al. does not disclose or suggest the claimed features of independent claims 1, 10, 18, and 27 that the claimed **router** that can reorder a group of data packets “associated with the corresponding secure connection”, let alone outputting *to the cryptographic module* the corresponding group of data from each corresponding queuing module for generation of the encrypted packets, as claimed.

Rather, Crichton et al. consistently teaches that a **source terminal device** (i.e., a “local device”) first generates an encrypted bit stream, and *then* that the encrypted bit stream is output

¹Claims 1 and 10 are explicitly identified in para. 4 on page 2, and claims 18 and 27 are included in para. 19 as having “similar limitations as to claims 1-10 and 36”.

to a "Bit Synchronizer and Internetworker" (BSI) for transmission via a network. For example, Crichton et al. describes at para. 3, lines 10-25 that a prior art secure telephone unit (STU) includes an analog to digital converter for generating a bitstream in response to receiving analog signals from an analog handset microphone: the bitstream is encrypted by a cryptographic module in the STU, and the encrypted bitstream is output by a voice-band modem in the STU to an analog network interface for transmission on a voice network.

Paragraph 5 simply describes that each sequential bit of a bitstream is "exclusively added" by the cryptographic module (i.e., "the encryptor") to produce in an encrypted bitstream; in other words, paragraph 5 only describes outputting a bitstream to the cryptographic module; as described above with respect to paragraph 2, however, Crichton et al. describes only encryption of a single bitstream having been generated from an analog to digital converter, and neither discloses or suggests a **router** outputting to the cryptographic module the "group of data packets, *from each corresponding queuing module* according to the corresponding assigned maximum output bandwidth".

Moreover, Crichton et al. consistently describes that the *encrypted bitstream* output by the secure source (e.g., 100 of Fig. 1; 1300 of Fig. 13; 1507 of Fig. 15) is received by a local BSI (e.g., 160 of Fig. 1; 1360 of Fig. 13; 1560 of Fig. 15) (see, e.g., para. 18, lines 1-7; para. 51, lines 1-8) and packetized by the local BSI into fixed-size packet payloads (see, e.g., para. 18, lines 7-8; para. 50, lines 5-7; para. 51, lines 15-18; para. 52, lines 1-4): the BSI adds to each fixed-sized packet a "payload sequence number", and the BSI "sends each outbound packet to the outbound transmission path for transmission on a network (e.g., 140 of Fig. 1, 1340 of Fig. 13, 1540 of Fig. 15) as soon as the packet is assembled." (See, e.g., para. 18, lines 8-23; para. 50, lines 5-12; para. 52, especially lines 4-8 and 27-30).

Hence, Crichton et al. consistently describes that the encrypted bit stream output by the secure source is received by the local BSI for creation of packets having payload sequence numbers for transmission on a network. Hence, Crichton et al. neither discloses nor suggests the claimed "outputting *to the cryptographic module* the group of data packets, *from each corresponding queuing module ... for generation of the encrypted packets*", as claimed, where

the outputting to the cryptographic module for generation of the encrypted packets is performed in the router.²

Crichton et al. also neither discloses nor suggests the claimed router “controlling supply of the data packets *to the cryptographic module* by ... *reordering*, in each queuing module, a corresponding group of the data packets associated with the corresponding secure connection *according to a determined quality of service policy* ... and outputting to the cryptographic module the group of data packets, from each corresponding queuing module, *for generation of the encrypted packets*”, as claimed.

Rather Crichton et al. describes that the only reordering is performed by smoothing buffer in the remote BSI (e.g., 160' of Fig. 1, 1360' of Fig. 13, 1560' of Fig. 15) near the destination secure telephone (e.g., 100' of Fig. 1, 1300' of Fig. 13, “1505' of Fig. 15): the smoothing buffer (e.g., 508 of Figs. 5 and 5a) within the packet repair module 206 of the remote BSI reorders the packets received from the packet network (e.g., 140 of Fig. 1, 1340 of Fig. 13, 1540 of Fig. 15) based on the payload sequence number (para. 19, lines 9-14; para. 27, para. 54, lines 1-20; para. 56, para. 59, para. 59, para. 62, para. 68). The remote BSI outputs at synchronous intervals the sequential data from the smoothing buffer in a bitstream to the destination terminal that includes the STU or similar secure device, and locks the output of the smoothing buffer to the timing of the decryptor in the remote terminal (e.g., para. 20, para. 55, lines 15-21).

Hence, Crichton et al. neither discloses nor suggests reordering the group of data packets in a queuing module *according to a determined quality of service policy*, as claimed, let alone outputting the group of data packets from each queuing module to the cryptographic module *for generation of the encrypted packets*, as claimed. Rather, Crichton et al. reorders packets after encryption and after having passed through an IP network, in order to restore the packets in their order according to their sequence numbers.

²Also note in Fig. 15 that the disclosed IP router (1304, 1504) is distinct from the integrated packet secure phone 1505 that includes the crypto module 1507 and the BSI 1560, and that the BSI operations are performed before packets are transmitted to the IP router 1504 (para. 74).

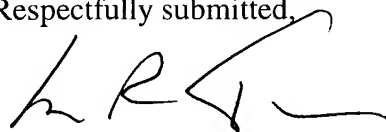
Hence, the §102 rejection should be withdrawn because it fails to demonstrate that the applied reference discloses each and every element of the claim. See MPEP 2131. "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). "Anticipation cannot be predicated on teachings in the reference which are vague or based on conjecture." *Studiengesellschaft Kohle mbH v. Dart Industries, Inc.*, 549 F. Supp. 716, 216 USPQ 381 (D. Del. 1982), *aff'd.*, 726 F.2d 724, 220 USPQ 841 (Fed. Cir. 1984).

It is believed the dependent claims are allowable in view of the foregoing.

In view of the above, it is believed this application is in condition for allowance, and such a Notice is respectfully solicited.

To the extent necessary, Applicant petitions for an extension of time under 37 C.F.R. 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including any missing or insufficient fees under 37 C.F.R. 1.17(a), to Deposit Account No. 50-1130, under Order No. 10-008, and please credit any excess fees to such deposit account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'L R Turkevich', with a long horizontal flourish extending to the right.

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